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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,969	02/20/2004	Hem P. Takiar	SAND-01004US1	7720
28554	7590	05/04/2006	EXAMINER	
VIERRA MAGEN MARCUS & DENIRO LLP 575 MARKET STREET SUITE 2500 SAN FRANCISCO, CA 94105			DINH, TUAN T	
			ART UNIT	PAPER NUMBER
			2841	

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/782,969

Applicant(s)

TAKIAR, HEM P.

Examiner

Tuan T. Dinh

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 52-73,80 and 81 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 52-73,80 and 81 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>02/04/01,03,04/05</u> | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Applicant's election of Group I (claims 52-73, 80-81) in the reply filed on 02/13/06 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Applicant's election with traverse of Specie IV, figures 6-7 (all pending claims are read on figures 6-7) in the reply filed on 02/13/06 is acknowledged. The traversal is on the ground(s) that "the applicant disagrees with the requirement to elect a single disclosed Species", see Remark, page 7. This is not found persuasive because the application containing claims directed to the following patentably distinct species of the claimed invention. The applicant is required under 35 U.S.C 121 to elect single specie for prosecution..

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Objections***

3. Claim 63 is objected to because of the following informalities:

Claim 63, line 3, "said first dimensions" should be changed to - - said first dimension - - for proper antecedence basis.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 52-59, 62-72, 80, and 81 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsuzaki et al. (U.S. Patent 5,867,218, hereafter Matsuzaki).

As to claims 52-54, 57-59, and 62, Matsuzaki discloses a non-volatile memory system (1) as shown in figures 1-3, comprising:

a card having a set of contacts (14) on an external surface of said card, said card having first and second surfaces (top and bottom surfaces, claim 57), and side surfaces formed between the first and second surface (claim 59),

said first surface defined a length and a width (claim 54) having a raised portion (1b); a circuit board enclosed within said card;

a plurality of non-volatile storage elements (16b, 16d, 17a, and 17b, which are flash memory cells, claim 53) and passive electrical elements (100, 13), which have capacitor (claim 58), see figure 3, enclosed within said card and connected to said circuit board, said passive electrical elements (13) are positioned in a part of said card at least partially defined by said raised portion (1b).

As to claims 63-67, 70, 72, 80, Matsuzaki discloses a non-volatile memory system (1) as shown in figures 1-3, comprising:

a card (1a) having a first dimension (length) and a second dimension (width) and first and second surfaces (top and bottom surfaces), said card having a first thickness along a first portion (1a) of said length and a second thickness along a second portion defined as a raised portion (1b) of said length, said second thickness is greater than said first thickness;

a plurality of non-volatile storage elements (16b,d, 17a,b), which being flash memory devices enclosed within said card; and passive electrical elements (13, 100), which are capacitors enclosed within said card, said passive electrical elements are positioned in said second portion, said passive electrical elements are in electrical communication with said non-volatile storage elements.

As to claims 55-56, 68-69, and 71, Matsuzaki further comprising: a controller element (16c) enclosed within said card and connected to said circuit board, and are in communication with the passive elements, see figure 3; and a set of electrical contacts (14) on an external surface of said card, said set of electrical contacts are in communication with said controller (16c).

As to claim 81, Matsuzaki discloses a non-volatile memory system (1) as shown in figures 1-3, comprising: a peripheral card having first and second surfaces (top and bottom), said first surface having a raised portion (1b); a circuit board enclosed within said peripheral card; a plurality of non-volatile storage elements (16b,d) enclosed within said peripheral card and connected to said circuit board; and a passive electrical component (13) enclosed within said peripheral card and connected to said circuit

board, said passive electrical component (13) is positioned in a part of said card at least partially defined by said raised portion (1b).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuzaki et al. ('218) in view of Ringer et al. (U.S. Patent 5,408,386).

As to claim 60, Matsuzaki discloses all of the limitations of the claimed invention, except for said raised portion providing a grip to grab said card.

Ringer et al. shows a card (13) as shown in figures 3-4 comprising a raise portion (24) having a grip to grab the card.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a raise portion provided with a grip to grab a card as taught by Ringer employed in the system of Matsuzaki et al. in order to hold for insert the card into the external connection device.

8. Claims 61, 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuzaki et al ('218) in view of Lo et al. (U.S. Patent 5,617,297).

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As to claim 61, Matsuzaki discloses all of the limitations of the claimed invention, except for said card includes molding material encapsulating said circuit board, said non-volatile storage elements and said passive electrical elements.

Lo et al teaches a card (110) as shown in figures 2-4 comprising a molding material (140) encapsulates a PCB (115) and components (123).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a molding material encapsulated a PCB and components as taught by Lo et al. employed in the system of Matsuzaki et al. in order to reduce a CTE and a shrinkage.

### ***Conclusion***

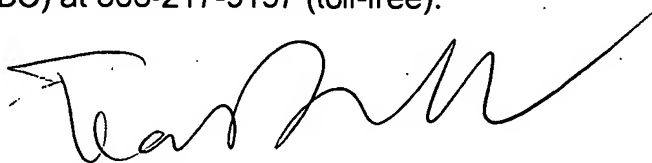
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bowen and Lourie et al. disclose related art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Dinh whose telephone number is 571-272-1929. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Tuan Dinh', with a long, sweeping horizontal stroke extending to the right.

Tuan Dinh  
April 22/2006.